



WORLDWIDE AVIATION • EST. 1967

N4AF

1968 CESSNA 421

RECORDS VOLUME

LEFT ENGINE LOGBOOKS

YEAR
1968

REGISTRATION
N4AF

SERIAL NO.
421-0142

Prepared by the worldwide aviation specialists at RidgeAir, Inc.

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N4AF

 The Standard
ENGINE LOG

ASA/SE-2



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6001 SIXTH AVENUE SO.
SEATTLE, WA 98108-3307

ENGINE RECORD — GENERAL INFORMATION

MANUFACTURER Continental MODEL GT510-520-DR(21) Left

SERIAL 219237-R TYPE CERTIFICATE _____

THIS ENGINE IS CURRENTLY INSTALLED IN AIRCRAFT N4AF

MINIMUM OCTANE FUEL 100 LL OIL GRADE SUMMER MOBIL AV-1 WINTER _____

MAGNETO TIME _____ POINT SETTING _____ FIRING ORDER _____

SPARK PLUG GAP _____

MFG. RECOMMENDED OVERHAUL AT 1600 HOURS.



The Standard

ENGINE LOG

REGISTERED OWNER RECORD

NAME BEVERLY L. HANDZLIK ADDRESS 36052 HARDENBURGCITY FARMINGTON HILLS STATE MICHIGAN FROM 19 APR 1988 TO _____

NAME _____ ADDRESS _____

CITY _____ STATE _____ FROM _____ TO _____

NAME _____ ADDRESS _____

CITY _____ STATE _____ FROM _____ TO _____

NAME _____ ADDRESS _____

CITY _____ STATE _____ FROM _____ TO _____

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NAME _____ ADDRESS _____

CITY _____ STATE _____ FROM _____ TO _____

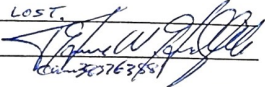
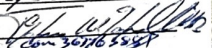
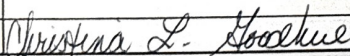
NAME _____ ADDRESS _____

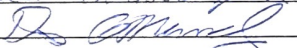
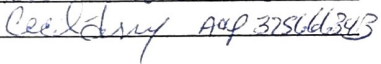
CITY _____ STATE _____ FROM _____ TO _____

NAME _____ ADDRESS _____

CITY _____ STATE _____ FROM _____ TO _____

NOTES

DATE 1989	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	DESCRIPTION OF INSPECTIONS, TESTS, REPAIRS AND ALTERATIONS ENTRIES MUST BE ENDORSED WITH NAME, RATING AND CERTIFICATE NUMBER OF MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
6/5				I Thomas W. HANDLIK CERTIFY TO THE BEST OF my knowledge Through PAST Research and discussions with The previous owner That This Engine had Approximately 500 HRS TSOH When The original Log Books were Lost.
Note:	Aircraft Total Time App 2400 @ this date			 Com 30763/851
				 CHRISTINA L. GOODHUE Notary Public, Livingston County, MI My Commission Expires Jan. 27, 1990
6/5				I Thomas W. HANDLIK CERTIFY TO THE BEST OF my knowledge Through PAST Research and discussions with The previous owner That The LEFT Prop Had Approximately 500 HRS TSOH When The original Log Books were Lost.
				 CHRISTINA L. GOODHUE Notary Public, Livingston County, MI My Commission Expires Jan. 27, 1990
				

DATE 19__	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	DESCRIPTION OF INSPECTIONS, TESTS, REPAIRS AND ALTERATIONS ENTRIES MUST BE ENDORSED WITH NAME, RATING AND CERTIFICATE NUMBER OF MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
6/6/89				Post flight inspection completed. Found to be airworthy for the intended Flight From GGB to Howell Livingston Co Airport. AD's 72-22-01, 73-22-01 & 75-23-08RS have been reviewed per attached letter.  AD 72-24515
12-29-89				CHANGED OIL & FILTER INSPECTED OIL FILTER NO METAL WAS FOUND. SERVICED WITH 13 qts MOBIL #1 ALL WAS GROUND RUN NO LEAKS WERE NOTED - END John Handlik AD 38081253.
12-6-90				Installed prop and torque AS PER m/m - track blades - normal  AD 375663943

LHPT N 4 AF

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1991				
2-3				Closed A/C after Insp A List of desc was given to owner to be corrected
9-3-91	13.2		513.2	CHANGED OIL & FILTER. MOBIL 1 OIL Serial J.H.R. #1370645 Coast Jerry #375666243
12-2-91	13.2			INSTALLED ALTERNATOR P/N ALU 9570 S/N 78180. HATH USED SERVICEABLE DRIVE ASSEMBLY. CHANGED Serial J.H.R. #1370645
2-7-92	24.3			REMOVED ALTERNATOR CHANGED DRIVE ASSEMBLY USED SERVICEABLE UNIT SUPPLIED BY ARCO ELECTRIC. REINSTALLED ALTERNATOR + THISTLE Serial J.H.R. #1370645

LHPT N 4 AF

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1992				
				plugs removed and comp ck all cylinders above normal see work order for compressor a/c test flown all eng provisions Normal
10-9	5603		5603	Date <u>10-9-92</u> TT <u>5603</u> TSMO <u>(1) 5603</u> (R) Date <u>10-9-92</u> TT <u>5603</u> TSMO <u>5603</u> (1) <u>5603</u> (R) I certify that this aircraft or engine has been inspected in accordance with a <u>100 hr.</u> inspection and was found to be in an airworthy condition Signed: <u>Coast Jerry</u> Cert. #: <u>2396066 J.A.</u> 10-9-92 @ 603 CHANGED ALTERNATOR DRIVE ASSEMBLY INSTALLED SERVICEABLE UNIT FROM ARCO ELECTRIC, P/N 9570 P3623889(1)

DATE 1992	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	DESCRIPTION OF INSPECTIONS, TESTS, REPAIRS AND ALTERATIONS ENTRIES MUST BE ENDORSED WITH NAME, RATING AND CERTIFICATE NUMBER OF MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
11-6-92	67.4			INSTALLED AND ELECTRIC OVERHAULING ALTERNATOR P/N PLV 9570 S/N 78186 WITH USED SERVICEABLE DRIVE 640933. REPLACED BOOTS JUNTS ON FRONT EXHAUST BALL JOINT. REPAIRED DISTORTED BAYFLEX SHAFTS.
				Seald J. H. H. AP1370645

6-11-93 175 - 675

Hobbs ~~9001~~ 175 LKA

June 11, 1993

Lt. engine installed servicable turbo tail pipe,
lt. exhaust stack, and rt. exhaust stack.
For Michigan Aviation RS KL2R956K

Howard Howells A&P 172323248

Howard Howells

DATE 1993	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	DESCRIPTION OF INSPECTIONS, TESTS, REPAIRS AND ALTERATIONS ENTRIES MUST BE ENDORSED WITH NAME, RATING AND CERTIFICATE NUMBER OF MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
7-2-93	181.8	-	681.8	N4AF 7-2-93 CHECKED 2. MAINLINE PRESS. SYSTEM. DIFF CR. 1. ING. 1.94/80 2. 5.8/80 3. 7.7/80 4. 60/80 5. 7.2/80 6. 6.8/80 CLEANED MILICEN AND INSULATORS 2. ING. + REPLACED SP. PLUGS. REPLACED 1. THERM CAN GANNON PLUG. CLEANED 1. PUT OUT RELAY. CHECKED + ADD. VOLTAGE REGULATOR Seald J. H. H. AP1370645

DATE 1992	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	DESCRIPTION OF INSPECTIONS, TESTS, REPAIRS AND ALTERATIONS ENTRIES MUST BE ENDORSED WITH NAME, RATING AND CERTIFICATE NUMBER OF MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
11-6-92	67.4	1		INSTALLED AUTO ELECTRIC OVERHAUL ALTERNATOR P/N ALU 9570 S/N 78186 WITH US20 SQUIBBER DRIVE 640933. REPLACED BOLTS JUNTS ON FRONT EXHAUST GALL JOINT. REPAIRED DISTRICTED BATTLE SHALS.
				Seal J. H. C. AP1370645

6-11-93 175 - 675

Hobbs ~~175~~ 175 AKA.

June 11, 1993

Lt. engine installed servicable turbo tail pipe,
lt. exhaust stack, and rt. exhaust stack.
For Michigan Aviation RS KL2R956K

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Howard Howells

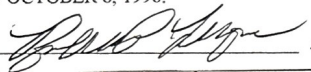
DATE 1993	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	DESCRIPTION OF INSPECTIONS, TESTS, REPAIRS AND ALTERATIONS ENTRIES MUST BE ENDORSED WITH NAME, RATING AND CERTIFICATE NUMBER OF MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
7-2-93	181.8	-	681.8	N4AF 7-2-93 CHECKED 1. MAIN PRESS. SYSTEM. DIFE CR. 1. INE 1.94/80 2. 5/80 3. 7/80 4. 60/7/80 5. 6/80 6. 6/80 7. 6/80 8. 6/80 9. 6/80 10. 6/80 11. 6/80 12. 6/80 13. 6/80 14. 6/80 15. 6/80 16. 6/80 17. 6/80 18. 6/80 19. 6/80 20. 6/80 21. 6/80 22. 6/80 23. 6/80 24. 6/80 25. 6/80 26. 6/80 27. 6/80 28. 6/80 29. 6/80 30. 6/80 31. 6/80 32. 6/80 33. 6/80 34. 6/80 35. 6/80 36. 6/80 37. 6/80 38. 6/80 39. 6/80 40. 6/80 41. 6/80 42. 6/80 43. 6/80 44. 6/80 45. 6/80 46. 6/80 47. 6/80 48. 6/80 49. 6/80 50. 6/80 51. 6/80 52. 6/80 53. 6/80 54. 6/80 55. 6/80 56. 6/80 57. 6/80 58. 6/80 59. 6/80 60. 6/80 61. 6/80 62. 6/80 63. 6/80 64. 6/80 65. 6/80 66. 6/80 67. 6/80 68. 6/80 69. 6/80 70. 6/80 71. 6/80 72. 6/80 73. 6/80 74. 6/80 75. 6/80 76. 6/80 77. 6/80 78. 6/80 79. 6/80 80. 6/80 81. 6/80 82. 6/80 83. 6/80 84. 6/80 85. 6/80 86. 6/80 87. 6/80 88. 6/80 89. 6/80 90. 6/80 91. 6/80 92. 6/80 93. 6/80 94. 6/80 95. 6/80 96. 6/80 97. 6/80 98. 6/80 99. 6/80 100. 6/80
				Seal J. H. C. AP1370645

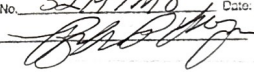
DATE 19__	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	DESCRIPTION OF INSPECTIONS, TESTS, REPAIRS AND ALTERATIONS ENTRIES MUST BE ENDORSED WITH NAME, RATING AND CERTIFICATE NUMBER OF MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
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DATE: OCT. 8, 1996 REG. NO. N4AF SER. NO. 421-0142 HOBBS: 92.8 ENG. SER. NO. 219237R

1. CHANGED OIL AND FILTER (CUT FILTER OPEN); TOOK OIL SAMPLE; SERVICED WITH AEROSHELL 15W50.
2. PERFORMED THE FOLLOWING MAINTENANCE AS PART OF MOBIL AV-1 PROGRAM:
 - A. COMPLIED WITH "TOP END INSPECTION PROTOCOL WORKSHEET".
 - B. COMPLIED WITH "PROPELLER INSPECTION PROTOCOL WORKSHEET".
 - C. REINSTALLED PROPELLER, S/N 682535, AND PROPELLER GOVERNOR, S/N 1583041D AFTER INSPECTION/REPAIR BY H&S PROPELLER SHOP (W.O. 17313 & 17316).
3. GROUND RUN OPERATIONAL/LEAK CHECK NORMAL.

THE AIRCRAFT AND/OR COMPONENT IDENTIFIED ABOVE WAS REPAIRED/INSPECTED IN ACCORDANCE WITH THE CURRENT REGULATIONS OF F.A.A. AND WAS FOUND AIRWORTHY AS AFFECTED BY THE WORK ACCOMPLISHED. PERTINENT DETAILS ARE ON FILE AT THIS AGENCY UNDER WORK ORDER NO. 31263MO AND 32034MO DATED OCTOBER 8, 1996.

SIGNATURE:  AERODYNAMICS, INC. BUER634C

AERODYNAMICS, INC.		BUER634C/BUER634C	
DATE <u>10/22/96</u>	REG. NO. <u>N4AF</u>	SER. NO. <u>421-0142</u>	W.O. NO. <u>32197MO</u>
AIRFRAME <u>XX</u> ENGINE (LEFT/RIGHT) <u>RIGHT</u>		PROP. (LEFT/RIGHT) <u></u> APPLIANCE <u></u>	
HOURS <u>92.8 Hobbs</u>	TSN/TSO <u></u>	TSN <u></u>	TSN <u></u>
LDGS <u></u>	CSN/CSO <u></u>	TSO <u></u>	TSO <u></u>
1. Removed left engine left magneto and replaced condensor P/N 10-349276; reinstalled magneto using new gasket; timed magneto. 2. Removed, cleaned, tested and reinstalled left engine spark plugs. 3. Tested left magneto ignition leads. 4. Operational check normal.			
MAINTENANCE RELEASE The aircraft and/or component identified above was repaired and inspected in accordance with the current regulations of ☒ FAA ☐ Other <u></u> and was found airworthy as affected by the work accomplished. Pertinent details are on file at this agency under Work Order No. <u>32197MO</u> Date: <u>10/22/96</u> Signature: <u></u> AERODYNAMICS INC. BUER634C			

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**ADI - AN AUTHORIZED RAYTHEON SERVICE CENTER
MAINTENANCE RELEASE / LOGBOOK ENTRY**

N7AF Serial Number 421-0142 Hourmeter 92.8 Date: 5/8/97

Replaced the #5 cylinder assembly with a new unit, p/n 654655A1. All work completed I/A/W the GTSIO 520 Manual. Operational check satisfactory.

THIS AIRCRAFT AND/OR COMPONENT IDENTIFIED ABOVE WAS REPAIRED AND INSPECTED IN ACCORDANCE WITH THE CURRENT REGULATIONS OF THE FAA AND WAS FOUND TO BE AIRWORTHY AS AFFECTED BY THE WORK ACCOMPLISHED. PERTINENT DETAILS ARE ON FILE AT THIS AGENCY UNDER

WORK ORDER NUMBER 33520MO DATED 5/8/97
SIGNATURE: Steve Williams AERODYNAMICS, INC. BUER634C

DATE 19__	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	DESCRIPTION OF INSPECTIONS, TESTS, REPAIRS AND ALTERATIONS ENTRIES MUST BE ENDORSED WITH NAME, RATING AND CERTIFICATE NUMBER OF MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
Sept 8	1997	at	93 hours	hobbs - Engine run-up compression
	tested: #1	18/80	#2 12/80	#3 14/80 #4 10/80 #5 16/80
	#6 19/80			Cleaned gapped and re-installed spark plugs.
				Drained fuel sumps and gascolators cleaned and re-installed
				spark plugs and fuel nozzles. Checked mag to engine timing
				20° b/c. Secured fuel injector lines, retorqued rocker covers
				and sump bolts. Engine washed with spirits, ground, run-up
				and leak checked satisfactory. AD's researched to date, complied
				with AD 15-23-08 r/s exhaust inspection, complied with AD
				91-01-13 hose inspection
				I certify that this engine
				has been inspected in accordance
				with a <u>annual</u> inspection
				and was determined to be
				in airworthy condition.
				<u>Paul Stepan</u>
				AEP 383769772 1A

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08/12/2009 N4AF LH Engine S/N 219237-R TTSO 629.8 Hobbs 129.8

Performed 100-hour inspection IAW Cessna 421 Maintenance Manual. Drained and replaced engine oil with Aeroshell 100. Replaced CH148 oil filter. Cleaned gapped, tested spark plugs and replaced plugs with new gaskets. Cleaned injectors and replaced o-rings and upper deck seals with Continental factory parts. Replaced all oil, hydraulic and fuel hoses with Teflon lined hoses manufactured by Aviall (reference attached work order). Checked magneto to engine timing. R&R #2 and #4 cylinder assemblies with serviceable units from Sentry Aircraft Cylinders using new rings IAW TCM GTSIO 520 Overhaul Manual. Compression tested #1 70/80, #2 68/80, #3 71/80, #4 68/80, #5 72/80, #6 74/80. CW AD 2007-05-15 (i) Starter adapter assembly IAW Part 2 TCM MSB No. MSB94-4G, backlash measured: 12:00-.040 in., 3:00-.040 in., 6:00-.040 in., 9:00-.040 in.. Next due: TTSO 829.8. For compliance details of AD 2000-01-16 Exhaust System, refer to Airframe logbook. Performed post inspection run up and leak check good.

I certify that this aircraft engine has been inspected in accordance with a 100-hour inspection and was determined to be in airworthy condition.

Dennis Tanker A&P 3165442



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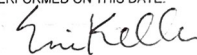
2/14/2010 N4AF LH Engine

Hobbs 141.0

Drained and replaced engine oil, installed new oil filter p/n CH48111
Performed engine run, no leaks noted.

THIS AIRCRAFT HAS BEEN INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURES
MAINTENANCE PROGRAM. THIS AIRCRAFT IS APPROVED FOR RETURN TO SERVICE PERTAINING
TO THE WORK PERFORMED ON THIS DATE.

ERIC KELLER
A&P 3428700



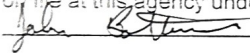
09/03/2010 N4AF LH Engine S/N 219237-R TTSO 771.2 Hobbs 171.2

Performed 100-hour inspection IAW Cessna 421 Maintenance Manual. Drained and replaced engine oil with Aeroshell 100. Replaced CH148 oil filter. Cleaned gapped, tested spark plugs. Checked magneto to engine timing. Compression tested #1 65/80, #2 67/80, #3 68/80, #4 76/80, #5 68/80, #6 75/80. CW AD 2007-05-15 (i) Starter adapter assembly IAW Part 2 TCM MSB No. MSB94-4G, backlash measured: 12:00-.040 in., 3:00-.040 in., 6:00-.040 in., 9:00-.040 in.. Next due: TTSO 871.2. For compliance details of AD 2000-01-16 Exhaust System, refer to Airframe logbook. Performed post inspection run up and leak check good.

I certify that this aircraft engine has been inspected in accordance with a 100-hour inspection and was determined to be in airworthy condition.

Dennis Tanker A&P 3165442



DATE 12-11-11	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	DESCRIPTION OF INSPECTIONS, TESTS, REPAIRS AND ALTERATIONS ENTRIES MUST BE ENDORSED WITH NAME, RATING AND CERTIFICATE NUMBER OF MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
				Northeast Florida Aircraft Maintenance Inc. 855-12 St Johns Bluff Rd Jacksonville Florida 904-641-8933
				Reg # N4AF Make CESSNA Model 421
				Date 02-23-2011 W/O # 11777 Meter 195.5 S/N 4210142
				Left Engine. Removed spark plugs and cleaned.
				Removed #4 fuel nozzle and cleaned. Checked mag
				timing. found ok. Replaced broken rocker shaft bolts
				with new. Replaced rocker cover with used servicable
				unit. Washed engine down and ground run up and leak
				check ok. This aircraft was repaired and inspected in
				accordance with current regulations of the FAA and is
				approved for return to service. Details of this repair are
				on file at this agency under the work order listed above.
				
				John Bottensek NW4R403M

[illegible]

4. The fourth part of the document discusses the implications of the study and provides recommendations for future research. It also addresses the limitations of the study and suggests ways to overcome them.

5. The final part of the document is a conclusion that summarizes the main findings and reiterates the significance of the study. It also includes a list of references and a list of figures and tables.

[The page contains dense, illegible handwritten notes.]

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				 16111 Addison Road, Suite 100, Addison, TX 75001 972-866-8814 <u>Left</u> engine Logbook Entry N4AF Cessna 421 S/N 421-0142 Hobbs 132.7 AFTT: 04/06/2016 S/N TSOH: TSN: Installed serviceable P/N 631814 rocker cover #5 cylinder exhaust position using new P/N 632459 gasket, Secure chaffing breather hose as needed, Replace popped rivits in engine beam inboard aft top, Install new P/N 2265C450-SS tailpipe support clamp, Wash engine ground run and leak checked. I certify this engine has been inspected and/or repaired in accordance with current Federal Aviation Regulations found to be in airworthy condition and is hereby returned to service with respect to work performed.  Joseph L Brown A&P226812IA

[illegible]

DATE 19__	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	DESCRIPTION OF INSPECTIONS, TESTS, REPAIRS AND ALTERATIONS ENTRIES MUST BE ENDORSED WITH NAME, RATING AND CERTIFICATE NUMBER OF MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
				 16111 Addison Road, Suite 100, Addison, TX 75001 972-866-8814 <u>Left</u> engine Logbook Entry N4AF Cessna 421 S/N 421-0142 Hobbs 187.0 AFTT: 10/11/16 S/N 219237 TSOH: TSN: Change oil and filter, cut remove filter and inspect for metal non noted, install new AA48111-2 filter and serviced with 12 quarts Aeroshell 100W Plus oil, C/W AD#2000-01-16 (b) & (e), Engine ground run and leak checked. I certify this engine has been inspected and/or repaired in accordance with current Federal Aviation Regulations found to be in airworthy condition and is hereby returned to service with respect to work performed. Joseph L Brown A&P2226812IA

DATE 19__	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	DESCRIPTION OF INSPECTIONS, TESTS, REPAIRS AND ALTERATIONS ENTRIES MUST BE ENDORSED WITH NAME, RATING AND CERTIFICATE NUMBER OF MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
				 16111 Addison Road, Suite 100, Addison, TX 75001 972-866-8814 <u>Left</u> engine Logbook Entry N4AF Cessna 421 S/N 421-0142 Hobbs: 205.0 AFTT: 2810.0 09/01/2017 GTSIO-520-D S/N 219237-R TSOH: 910.0 TSN: UNK Annual inspection performed, C/W AD#07-05-15 per MSB 94-4G Part 2 Measurements were 0.15, 0.15, 0.15, 0.15, due again @ AFTT: 2910.0, Part 3 removal and inspection of gears due at AFTT: 3120.0 Compressions #1 64/80, #2 70/80, #3 74/80, #4 78/80, #5 60/80, #6 69/80, Change oil and filter, Cut removed filter inspect for metal with none found, Install AA48111-2 filter and service with Aeroshell 100W plus oil, C/W RAM recommended annual cleaning and lube of waste gate and controller, Clean all fuel nozzles and re-install using new P/N MS29513-010 and SA640612, SA633958-3, SA633958-5 Seals, Clean, gap and test plugs, Remove turbocharger P/N 406990-9004 S/N FBR1985 sent to CRS#MAMR190K for overhaul under WO# 52992 installed ops and leak checked normal, Installed new P/N 5155101-10 turbo support bracket, Install new P/N 1366-1 Rocker cover silicon gaskets on #1, #2, #3 & #4 cylinders, Install new P/N 515586-1 tailpipe bracket and P/N K5155156-3 S/N 255883 tailpipe, Install P/N 2265-210SH clamp on turbo bypass, Install new P/N AS3578-038 seal on starter, Install P/N 632905 cylinder baffles on #4, #5 & #6 inter cylinder baffles, Wash engine ground run and leak checked. I certify this engine has been inspected and/or repaired in accordance with current Federal Aviation Regulations found to be in airworthy condition and is hereby returned to service with respect to work performed. Joseph L Brown A&P2226812

DATE	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	DESCRIPTION OF INSPECTIONS, TESTS, REPAIRS AND ALTERATIONS
19__				ENTRIES MUST BE ENDORSED WITH NAME, RATING AND CERTIFICATE NUMBER OF MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
				 FLIGHTSTAR AEROMOTIVE 16111 Addison Road, Suite 100, Addison, TX 75001 972-866-8814 <u>Left</u> engine Logbook Entry N4AF Cessna 421 S/N 421-0142 Hobbs: 220.8 AFTT: 2825.8 04/23/2018 GTSIO-520-D S/N 219237-R TSOH: 925.8 TSN: UNK Install Tanis heater in accordance with STC Number SE03309CH and Drawing 02927-115 Rev. F Dated March 26, 2018, This Tanis system is to be maintained in accordance with Tanis Document No. TICA2097 Revision C dated April 18, 2014, Install CHT probe in #1 cylinder P/N 10-18500, Installed overhauled starter P/N MHJ-4003 S/N A130957 repaired at CRS#PU4R453M I certify this engine has been inspected and/or repaired in accordance with current Federal Aviation Regulations found to be in airworthy condition and is hereby returned to service with respect to work performed. Joseph L Brown A&P 226812

[illegible]

DATE 19__	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	DESCRIPTION OF INSPECTIONS, TESTS, REPAIRS AND ALTERATIONS ENTRIES MUST BE ENDORSED WITH NAME, RATING AND CERTIFICATE NUMBER OF MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
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16111 Addison Road, Suite 100, Addison, TX 75001
972-866-8814

Left engine Logbook Entry

N4AF

Cessna 421 S/N 421-0142 Hobbs: 262.8 AFTT: 2867.8 04/01/2019
GTSIO-520-D S/N 219237-R TSOH: 967.8 TSN: UNK
Annual inspection performed, C/W AD#07-05-15 pe MSB 94-4G Part 2 Measurements were 0.15, 0.15, 0.15, 0.15, due again @ AFTT: 2967.8, Part 3 removal and inspection of gears due at AFTT: 3120.0, Compressions #1 78/80, #2 70/80, #3 68/80, #4 70/80, #5 72/80, #6 76/80, Change oil and filter, Cut removed filter inspect for metal with none found, Install AA48111-2 filter and service with Aeroshell 100W plus oil, C/W RAM recommended annual cleaning and lube of waste gate and controller, Clean all fuel nozzles and re-install using new P/N MS29513-010 and SA640612, SA633958-3, SA633958-5 Seals, Clean, gap and test plugs, Wash engine ground run and leak checked. I certify this engine has been inspected and/or repaired in accordance with current Federal Aviation Regulations found to be in airworthy condition and is hereby returned to service with respect to work performed.

Joseph L Brown
A&P 226812IA

DATE 19__	RECORDING TACH TIME	TODAYS FLIGHT	TOTAL TIME IN SERVICE	DESCRIPTION OF INSPECTIONS, TESTS, REPAIRS AND ALTERATIONS ENTRIES MUST BE ENDORSED WITH NAME, RATING AND CERTIFICATE NUMBER OF MECHANIC OR REPAIR FACILITY. (SEE BACK PAGES FOR OTHER SPECIFIC ENTRIES.)
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N4AF (Left Engine Logs)
TCM GTSIO 520D S/N 219237-R

Changed oil and filter (Aeroshell W100 plus) Cut and inspected filter OK. Collected oil samples. Pre-oiled engine prior to start.
Cleaned air/oil separators.

Removed left Prestolite ALV9510 alternators.

Installed new FAA/PMA Hartzell ALV9610 alternators:

Left: s/n H-T091444 with OVH with OVH drive coupling #646655 s/n QAA048188 by Quality Aircraft Acc. (QYIR334Y) w.o. # 048188

Installed Alternators front mount gear drive Coupling with new 630691 thrust washers and provided attach nuts meeting Hartzell engine technologies Service Bulletin #081 (attach nuts etched "H"). Attached per Continental M-O Procedures manual 10-4.1 through 10-4.1.5 (torque to 300-450 inch lbs.) and Hartzell Service Information letter A-140.

Removed left and right Starters #MHJ4003.

Installed Hartzell engine technologies new FAA/PMA starters #PM2407 Left/ s/n H-T091865

DATE 10/29/2019

HOBBS 285.3

AIRCRAFT TOTAL TIME 2605.0

Engine TSMOVH 990.3

The engine identified was repaired and/or serviced in accordance with current Federal Aviation Administration regulations and is hereby approved for return to service with respect to work performed.



Anthony R. Saxton AP32537461A

Anthony R. Saxton

[illegible][illegible]

DATE

19__



Hangar 23, Tulsa International Airport-Tulsa, OK 74115
(918)836-6418

Date: 5/19/2022 Aircraft N4AF

N4AF Cessna 421-0142 HM 448.0 hrs. MA22-06694 dated 5/19/2022.

A. Connected pressurization cart to aircraft and pressurized on April 21, 2022. Found the following leak areas.

1. Large leak at belly panel just aft of the forward pressure bulkhead by the nose wheel tunnel.
2. Moderate leak at the belly ram air scoop.
3. Moderate leak at the ram dump valve in front of the heater.
4. Moderate leak at the rudder cables in the aft pressure bulkhead.
5. Minor leaks in the wing left and right wing root area at the wire bundles.
6. Moderate leak at the emergency exit door at the top area.

B. Made the following repair to the pressurization system.

1. Removed old sealant and deteriorated seal on the belly panel just aft of the front pressure bulkhead. Installed new seal and reinstalled panel with new hardware.
2. Adjusted ram dump valve setting and cable rigging.
3. Inspected belly duct vent and check valve. No parts were available for repair.

C. Flew a/c on May 18th to check pressurization for the above repairs.

1. Checked cabin pressurization at 65% power and had 4.2 psi when pressurizing off both sources.
2. Cabin pressure was 3.0 psi when pressurizing off the left engine source only.
3. Cabin pressure was 3.1 psi when pressurizing off the right engine source only.

These rates are acceptable and no other repairs are needed.

D. Elevator work. Removed elevators and inspect middle brackets and bearings. Found bearings and brackets were worn allowing excessive play. Installed new brackets, bearings and hardware. Installation was completed by installing parts per kit SK421-130B2 per SNL88-10 revision 1 dated Nov. 3, 2003. Performed an elevator and elevator trim tab travel check. Had to adjust rigging to get correct travels. No change in weight and balance figures. Flew a/c to check elevator system.

4 W Eng

OF
(ES.)

DATE

19__



Hangar 23, Tulsa International Airport-Tulsa, OK 74115
(918)836-6418

Sublet Service Completed: 5/09/2022

Description: Elevator Brackets drilling holes in stainless steel.

Performed By: Cuccio, Rick PO # PO22-23077

The articles and/or work hereon described is/are certified
airworthy (unless otherwise specified).

Autopilots Central, Inc.

FAA CRS CM2R747K

Authorized Signature

[Signature]

Augustus Aviation Service

L/H engine

TSOH: 1154.8

S/N: 519400-H

Hobbs: 449.8

Date: 11/1/2022

N4AF

9000 N. Navarro Rd.

Corsicana Tx, 75109

(469)235-4674

Completed a 100hr inspection to this engine in accordance with FAR 43 appendix D with reference to Cessna 421 inspection guide. Ran engine and completed a deferential compression test, the numbers were as follows: 1) 70 /80 2) 72 /80 3) 67 /80 4) 74 /80 5) 74 /80 6) 65 /80. Removed spark plugs, cleaned, inspected, tested, and reinstalled. C/W AD07-05-15 per MSB 94-4G part 2 measurements were 016, 0.15, 0.15, 0.15. Part 3 removal and inspection of gears due at AFTT: 3120.0. ADs checked through Biweekly 2022-23. Ran engine, no defects noted. I certify this engine has been inspected in accordance with a 100hr inspection and was determined to be in Airworthy condition.

William Koonce A&P3014392IA

[Signature]

R OF
RIES.)

Global Aviation Services WO 2312-6721

Engine Model: Continental GTSIO-520-D(21)	Engine S/N: 219237-R	Reg No: N-1AF	AC Tach: 494.7	AC Hobbs: 485.1	Engine TT: UKN AFTT: 3090.1	Engine TSOH: 1190.1	Date: 05/22/2024
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Performed 100hr inspection and the following work in reference to Cessna Maintenance Manual P/N D817-15-13, Continental M-0, and 14 CFR 43 Appendix D:

1. Differential Pressures: (1) 75/80, (2) 73/80, (3) 74/80, (4) 78/80, (5) 71/80, (6) 78/80
2. Drained oil, removed oil filter, and inspected element. Installed new oil filter P/N AA48111, torqued, and safetied. Serviced engine with 11 qts. Aeroshell W100Plus.
3. Removed all spark plugs, cleaned, inspected, installed, and torqued.
7. Adjusted idle mixture and idle speed.
8. Engine run OK. Leak check OK.

Work performed by Joshua Drake, Ethan Perez, and Kevin Salisbury.

I certify that this engine has been inspected 15W annual/100hr inspection and was determined to be in airworthy condition.

inspected 1/2W annual/100hr inspection and was determined

Greg Dukes AP35071381A

[illegible]

LH Engine Log Entry

Date: 06-29-25
Reg. No.: N4AF
Engine M/N: Continental

ACTT:
Model: CE-421
Engine: GTSIO-520-D(21)

ACTL:
S/N: 421-0142
S/N: 219237-R

Complied with AD 2023-05-16, Amendment 39-22385 dated March 15, 2023 – “This AD was prompted by a report of a quality escape involving improper installation of counterweight retaining rings in the counterweight groove during manufacture. The FAA is issuing this AD to prevent departure of counterweight and retaining hardware from the crankshaft assembly. The unsafe condition, if not addressed, could result in loss of engine oil pressure, catastrophic engine damage, engine seizure, and consequent loss of the aircraft.” **This AD is N/A** due to engine having more than 200 hours in service, IAW Continental MSB23-01A, page 1 (page 1 of 8) compliance paragraph and engine model “D” is not listed as affected on page 9 (1 of 30) and page 10 (2 of 30).

Complied with AD 2023-02-12, Amendment 39-22319 dated Feb-17-2023 – “The FAA is adopting a new airworthiness directive (AD) for certain Continental Aerospace Technologies, Inc. (Continental) GTSIO-520, IO-470, IO-520, IO-550, IOF-550, LIO-470, LIO-520, LTSIO-520, O-470, TSIO-470, TSIO-520, TSIO-550, TSIOF-550, and TSIO-550 model reciprocating engines with a certain Superior Air Parts, Inc. (SAP) cylinder assembly or intake valve installed. The affected cylinder assemblies and intake valves are installed as a replacement part under parts manufacturer approval (PMA) on certain affected Continental engines. This AD was prompted by three intake valve failures on reciprocating engines that resulted in engine damage and emergency landing or aborted takeoff. This AD requires replacement of the affected engine intake valve. The FAA is issuing this AD to address the unsafe condition on these products.” **This AD is N/A** IAW Superior Air Parts MSB22-01, none of the cylinders have been replaced or worked on, by any one from Jan-2022 to Feb-2022. Also, no log entries or 8130's from Superior Air Parts in log books.

Complied with AD 2022-16-03, Amendment 39-22132 dated Aug-15-2022 – “(1) Continental Aerospace Technologies, Inc. reciprocating engine models identified in Table 1 to paragraph (c) of this AD that are equipped with an S-1200 series magneto having a serial number (S/N) between F21EA057 and F21KA009R, inclusive, manufactured and sold between May and November 2021; and (2) Lycoming Engines and Textron Lycoming/Subsidiary of Textron, Inc. reciprocating engine models identified in Table 2 to paragraph (c) of this AD that are equipped with an S-1200 series magneto authorized by Continental Aerospace Technologies, Inc. Parts Manufacturer Approval (PMA) Supplements 1-54, having an S/N between F21EA057 and F21KA009R, inclusive, manufactured and sold between May and November 2021.” **This AD is N/A** IAW Continental Aerospace Technologies Critical Service Bulletin CSB673C. All four maneto's serial numbers do not fall under the list of defective serial numbers. Currently installed magnetos, RH engine magneto, outboard P/N 10-349260-7 S/N L078948FR and inboard P/N 10-349220-4 S/N (F059807FR this number is a best reading of the serial number. Serial number is very faded). LH engine magneto inboard P/N 10-349260-2 S/N A246903 and out board P/N 10-349220-4 S/N H119704FR.

Complied with AD 2020-16-11, Amendment 39-21195 dated Sep-21-2020 – “This AD applies to Continental Aerospace Technologies, Inc. (Type Certificate previously held by Continental Motors, Inc.) model GTSIO-520-C, GTSIO-520-D, GTSIO-520-H, GTSIO-520-K, GTSIO-520-L, GTSIO-520-M, GTSIO-520-, IO-550-G, IO-550-, IO-550-P, IO-550-R, IOF-550- IOF-550-P, IOF-550-R, TSIO-520-BE, TSIO-550-A, TSIO-550-B, TSIO-550-C, TSIO-550-E, TSIO-550-G, TSIO-550-K, TSIO-550-, TSIOF-550-D, TSIOF-550-J, TSIOF-550-K, and TSIOF-550-P reciprocating aviation gasoline (AvGas) engines, originally manufactured, rebuilt, or modified with a cross-flow cylinder assembly replacement, on or after November 1, 2014, and with a cross-flow cylinder assembly, part number (PIN) 658538, 658540, 658542, 658591, 658595, 658613, 658624, 658539, 658541, 658590, 658594, 658603, 658623, or 658630, installed.” **This AD is N/A** IAW Continental Aerospace Technologies MSB18-08B this engine was overhauled before Nov-2014. Engine was overhauled some time before the year 1989. This engine has not been rebuilt since then.

Complied with AD 2016-16-12, Amendment 39-18610 dated Sep-15-2016 – “This AD applies to all Continental Motors, Inc. (CMI) model -520 and -550 reciprocating engines, and to all other CMI engine models approved for the use of model -520 and -550 cylinder assemblies such as the CMI model -470 when modified by supplemental type certificate (STC), with Continental Motors Inc., San Antonio (formerly Airmotive Engineering Corp.), replacement parts manufacturer approval (PMA) cylinder assemblies, marketed by Engine Components International Division (hereinafter referred to as ECI), part number (PIN) AEC 631397, with ECI Class 71 or Class 76, serial number (SIN) 1 through SIN 61176, installed.” **This AD is N/A** IAW Eci Service Instruction No. 99-8-1. Eci service instructions call out for engines model O-470, IO-470, TISO-470, IO-520, TSIO-520, IO-550, IOF-550 series engines. What is currently installed is a GTISO-520.

Complied with AD 2012-03-06, Amendment 39-16947 dated Feb-24-2012 – “This AD applies to all Superior Air Parts, Lycoming Engines, and Continental Motors, Inc. fuel injected reciprocating engine models with an AVStar Fuel Systems, Inc. (AFS) fuel servo diaphragm, part number (PIN) AV2541801 or PIN AV2541803, installed.” **This AD is N/A** IAW Lycoming MSB# 596 and AVStar MSB# AFS-SB6 Rev2 due to engine model number. Both MSB's call out for engine model IO-360, IO-360, IO-540, IO-720, LTIO-540 and TIO-540 series engines. What is currently installed is a GTISO-520. Also, the engines that are called out by the MSB's engine serial numbers are not installed on this aircraft.

Complied with AD 2011-13-03, Amendment 39-16726 dated Jul-13-2011 – “We are adopting a new airworthiness directive (AD) for the products listed above. This AD requires inspecting certain Lycoming and TCM reciprocating engines with certain Hartzell Engine Technologies, LLC (HET) turbochargers installed, and disassembly and cleaning of the turbocharger center housing and rotating assembly (CHRA) cavities of affected turbochargers. This AD was prompted by a turbocharger failure due to machining debris left in the cavities of the CHRA during manufacture. We are issuing this AD to prevent seizure of the turbocharger turbine, which could result in damage to the engine, and smoke in the airplane cabin.” **This AD is N/A** IAW Hartzell Engine Technologies SB# 040 Rev Nov-9-2010, page 1, compliance section. Both left and right hand engine turbo’s since overhaul has more than 50 hours in service. Currently installed LH turbo M/N Main Turbo Systems Cert#MAMR190K P/N 633274-4 S/N FBR1985 and RH turbo M/N Main Turbo Systems Cert#MAMR190K P/N 633274-4 S/N HDR0134.

Complied with AD 2010-11-04, Amendment 39-16309 dated Jun-16-2010 – “This AD applies to all Teledyne Continental Motors (TCM) 240, 346, 360, 470, 520, and 550 series and Rolls-Royce Motors, Ltd. (R-RM) IO-240-A reciprocating engines with hydraulic lifters, part numbers (P/Ns) 657913, 657915, or 657916, installed. These engines are installed on, but not limited to, general aviation airplanes.” **This AD is N/A** IAW Teledyne Continental MSB09-8A both engine serials are not on the list of defective engines and engine model number is not on the list of defective engine models.

Complied with AD 2010-07-08, Amendment 39-16253 dated Apr-19-2010 – “The FAA is adopting a new airworthiness directive (AD) for certain Kelly Aerospace Energy Systems, LLC (KAES) rebuilt turbochargers. This AD requires removal from service of certain part number (PIN) and serial number (SIN) rebuilt turbochargers. This AD results from three reports of infant mortality turbine wheel failure in rebuilt turbochargers, since June of 2007. We are issuing this AD to prevent separation or seizure of the turbocharger turbine, which could result in full or partial engine power loss, loss of engine oil, and smoke in the airplane cabin.” **This AD is N/A** IAW Lycoming MSB# 591A. LH engine turbo P/N 633274-4 S/N FBR1985 and RH engine turbo P/N 633274-4 S/N HDR0134 turbo serial numbers are not on the list of defective turbo’s.

Complied with AD 2004-08-10, Amendment 39-13579 dated May-5-2004 – “The FAA is adopting a new airworthiness directive (AD) for Teledyne Continental Motors (TCM) models 520 and 550 series engines with certain ECi cylinders installed. This AD requires replacing certain serial-numbered (SN) cylinders supplied by ECi before further flight. This AD results from reports of 34 failures of cylinder heads marketed by ECi. We are issuing this AD to prevent loss of engine power due to cracks in the cylinder head and possible engine failure caused by separation of a cylinder head.” **This AD is N/A** IAW Eci Mandatory Service Bulletin S.I. No. 04-1 Rev1. The engine model and serial are not on the defective list.

Complied with AD 99-19-01, Amendment 39-1290 dated Sep-30-1999 – “This amendment adopts a new airworthiness directive (AD) that is applicable to Teledyne Continental Motors (TCM) O-470, IO-470, TSIO-470, IO-520, TSIO-520, LTSIO-520, GTSIO-520, IO-550, TSIO-550, and TSIO-550 series reciprocating engines. This action supersedes priority letter AD 99-09-17 that currently requires a one-time visual and ultrasonic (UT) inspection of the No. 2 and No. 5 crankshaft cheeks for cracks. All crankshafts found with a cracked cheek must be replaced with a serviceable crankshaft prior to further flight. This action adds to the applicability TCM GTSIO-520 series engines and additional engines, identified by serial numbers (S/Ns), of currently affected engine series; references a revised service bulletin that clarifies snap ring installation; increases to 500 hours time-in-service (TIS) the cutoff for engines that require a more immediate inspection; and corrects the contact telephone number for TCM. This amendment is prompted by inspection results from the current priority letter AD. The actions specified by this AD are intended to prevent crankshaft failure due to crankshaft cheek cracks, which could result in total engine power loss, in-flight engine failure, and possible forced landing.” **This AD is N/A** IAW TCM CSB99-6, on page 2 of 13 both engine serial numbers are not on the list of defective engines.

Complied with AD 98-17-11, Amendment 39-10713 dated Oct-19-1998 – “This amendment adopts a new airworthiness directive (AD), applicable to certain Textron Lycoming and Teledyne Continental Motors reciprocating engines that had crankshafts repaired by Nelson Balancing Service, Repair Station Certificate No. NB7R820J, Bedford, Massachusetts, that requires removal from service of affected crankshafts, or a visual inspection, magnetic particle inspection, and dimensional check of the crankshaft journals, and, if necessary, rework or removal from service of affected crankshafts and replacement with serviceable parts. This amendment is prompted by reports of crankshafts exhibiting heat check cracking of the nitrided bearing surfaces which led to crankshaft cracking and subsequent failure. The actions specified by this AD are intended to prevent crankshaft failure due to cracking, which could result in an inflight engine failure and possible forced landing.” **This AD is N/A** IAW FAA AD 98-17-11 page 10 of 13, GTSIO-520 engine serial # 210114-70H is not installed on this aircraft.

Complied with AD 95-21-15, Amendment 39-9402 dated Nov-28-1995 – “This amendment adopts a new airworthiness directive (AD) that is applicable to certain Teledyne Continental Motors (TCM) reciprocating engines installed on certain aircraft identified by registration numbers. This action supersedes priority letter AD 94-14-12 that currently requires engines certified to operate on 91 octane or higher aviation gasoline (avgas) to undergo a teardown and analytical inspection for detonation damage, and engines certified to operate on 80 octane avgas to undergo inspection for evidence of possible internal engine damage. This action revises incorrect engine model numbers and aircraft registration numbers listed in the priority letter AD. This amendment is prompted by the Federal Aviation Administration (FAA) receiving more accurate information concerning which aircraft were fueled with the contaminated mixture at the affected airports. The actions specified by this AD are intended to prevent detonation due to low octane, which can result in severe engine damage and subsequent failure.” Reviewed log history of aircraft tail numbers since aircraft left the Cessna factory. Here is the list of tail number, N3179K, N542N and N4AF. These tail numbers are not on the list of failed aircraft tail numbers FAA AD 95-21-15 page 2 of 6.

Complied with AD 93-10-02, Amendment 39-8603 dated Aug-12-1993 – “Applicability: Teledyne Continental Motors (TCM) O-200, O-300, IO/TSIO/LTSIO-360, O/IO/TSIO-470, IO/TSIO/LTSIO/GTSIO-520, and IO/TSIO/TSIOI-550 series reciprocating engines listed by serial number in TCM Mandatory Service Bulletin (MSB) No. 93-12, dated May 12, 1993, or that contain cylinder assemblies purchased from TCM between July 29, 1992, and March 30, 1993; installed on but not limited to Aeronca Models 15AC and S15AC; American Champion (Bellanca) Models 7ACA and 402; Beagle Model 206S; Beech Models Debonaire, Bonanza, and Baron; Bellanca Models 14-19, 14-19-2, 14-19-3, 14-19-3A, 17-30, 17-31, and 17-31TC; Cessna Models 150, 170, 172, 180, 182, 185, 188, 205, 206, 207, 210, 303, 310, 320, 335, 336, 337, 340, 401, 402, 404, 414, 421, and T41; Aero Commander Models 200, 500, and 685; Champion Models Citabria and Lancer; Maule Models Bee Dee M-4, M-4, M-4C, M-4S, M-4T, M-4-210, M-4-210C, M-4-210S, M-4-210T, and M-5-210C; Mooney Models 231 and 252; Navion series; Piper Models Arrow, Seneca, and PA46-310P; and Taylorcraft Model F-19 aircraft.” **This AD is N/A** IAW Teledyne MSB No: 93-12 on page 5 of 7. Both engine serial number are not on the list of defective serial numbers.

Complied with AD 91-19-03, Amendment 39-8030 dated Sep-29-1991 – “Replace any removed filter with Champion filter P/N CH48108 or CH48109 having date codes other than those listed in paragraph (b) of the AD, or with any other FAA approved filter that is eligible for the applicable engines.” This AD has been complied with and both engine oil filters are P/N CH48111.

AD 81-24-06 has been complied with and in the back of engine log book dated 5-1-89.

AD 80-09-11 has been complied with and in the back of engine log book dated 5-1-89. Complied with by starter inspection.

AD 75-09-13 has been complied with and in the back of engine log book dated 5-1-89. N/A due to S/N

AD 79-05-09 has been complied with and in the back of engine log book dated 5-1-89. N/A due to S/N

AD 77-13-22 has been complied with and in the back of engine log book dated 5-1-89. N/A because of case markings.

AD 88-03-06 has been complied with and in the back of engine log book dated 5-1-89. N/A because of cylinder part number.

Page 3 of 3

I certify that this aircraft has been inspected with respect to the work performed in accordance with inspections and procedures for an inspection program required by FAR 91.409(f)(3), and has been found to be in airworthy condition, and is approved for return to service.

Marcel Massuda

Marcel Massuda

A&P A&P 3340475